

REMARKS/ARGUMENTS

Applicant would like to thank the Examiner for the careful consideration given the present application. The application has been carefully reviewed in light of the Office action, and amended as necessary to more clearly and particularly describe the subject matter that Applicant regards as the invention.

Reconsideration of the subject patent application in view of the present remarks is respectfully requested.

Claims 1, 5, 9 and 15 are amended.

Claim Rejections - 35 USC § 112

Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement, because the claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly concerned, to make and/or use the invention. The examiner requires to point where in the specification it discusses the added limitation.

The added limitation has been amended to “wherein said grouping means comprises grouping condition choosing means for choosing the grouping condition and a grouping frame for enclosing only the pattern holes corresponding to the chosen grouping condition.”

The specification describes on page 25, lines 22-25 that one of three grouping conditions can be chosen by a grouping condition choosing wizard 41. This disclosure provides support for

“grouping condition choosing means for choosing the grouping condition” of the added limitation which corresponds to the grouping condition choosing wizard 41.

The specification describes on page 26, line 17 to page 27, line 2 that when the attribute specification 42b is chosen, only the pattern holes 16d corresponding to the electronic component P4 of the specified kind are enclosed with the grouping frame 45d. The specification also describes on page 27, lines 7-12 that when the range specification 42c is chosen, a manipulation is performed to set a grouping frame 45e that encloses only the pattern holes (herein, the pattern holes 16c and 16d), which are the subjects to be grouped. These disclosures provide support for “a grouping frame for enclosing only the pattern holes corresponding to the chosen grouping condition” of the added limitation.

The specification describes on page 19, lines 6-9 that a function achieved by running the grouping processing program 26d on the computation portion 25 forms grouping means for classifying the element shape and position data into data groups grouped according to a grouping condition. The specification also describes on page 25, lines 15-21 that the grouping processing is performed automatically through the grouping processing program 26d. The specification also describes specific examples of the grouping processing using the grouping condition choosing means and the grouping frames on page 25, line 22 to page 27, line 21. These disclosures, together with the above disclosures, provide support for “wherein said grouping means comprises grouping condition choosing means for choosing the grouping condition and a grouping frame for enclosing only the pattern holes corresponding to the chosen grouping condition.”

Thus, the rejection as it applied to claims 1-20 is moot.

Claim Rejections - 35 USC § 101

Claims 5-8 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories. Claim 5 has been amended to comply with 35 U.S.C. 101. Specifically, the method of the amended claim 5 is tied to a printing inspection apparatus. Claims 6-8 are dependent from claim 5. Thus, the rejection as it applied to claims 5-8 is moot.

Claim Rejections - 35 USC § 103

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsujikawa (U.S. pat no 5,991,435) in view of Kishimoto (U.S. pat no 4,978,224) and official notice (MPEP 2144.03). Applicants respectfully disagree for at least the following reasons.

Regarding claim 1, neither Tsujikawa nor Kishimoto discloses, teaches or renders foreseeable grouping condition choosing means for choosing the grouping condition and a grouping frame for enclosing only the pattern holes corresponding to the chosen grouping condition.

Tsujikawa does not disclose the grouping condition choosing means and the grouping frame, since Tsujikawa does not disclose grouping means for classifying and grouping the element position data into data groups as admitted by the examiner in the Office action.

Kishimoto does not disclose a grouping frame for enclosing only the pattern holes corresponding to the chosen grouping condition. The broken lines (Figure 3) disclosed in Kishimoto enclose all of the chips to be inspected, regardless of the grouping condition. Also,

Kishimoto does not disclose any grouping condition choosing means, since no grouping condition under which a plurality of pattern holes are grouped into at least one data group is chosen in Kishimoto. Kishimoto merely discloses that the circuit board to be inspected is divided into areas to be viewed on the basis of these transmitted data (Kishimoto; column 4, line 67 to column 5, line 1). There is no disclosure in Kishimoto that any grouping condition is chosen for dividing the circuit board into the areas.

The Office action states that one skilled in the art would include a step of grouping plurality of grouped holes because to ensure proper alignment and placement. However, the claimed invention does not merely include a step of grouping plurality of holes, but includes choosing a grouping condition and enclosing only the pattern holes corresponding to the chosen grouping condition so that it is possible to perform an inspection according to importance or the order of priority of the inspection set in response to a kind of the substrate.

Similar arguments will apply to claim 5.

Accordingly, the combination of Tsujikawa, Kishimoto and official notice does not meet all of the limitations of claims 1 and 5. Therefore, the asserted combination of Tsujikawa, Kishimoto and official notice does not render claims 1 and 5 obvious. Thus, withdrawal of the rejection as it applies to claims 1 and 5 is respectfully requested.

Claims 2-4 and 6-8 which are dependent from claims 1 and 5, respectively should be allowable for at least the same reason as claims 1 and 5.

Claims 9–20 are rejected under 35 USC 103(a) as being unpatentable over Tsujikawa (U.S. pat no 5,991,435) in view of Kishimoto (U.S. pat no 4,978,224). Applicants respectfully disagree for at least the following reasons.

Regarding claim 9, neither Tsujikawa nor Kishimoto discloses, teaches or renders foreseeable grouping condition choosing means for choosing the grouping condition and a grouping frame for enclosing only the pattern holes corresponding to the chosen grouping condition. Tsujikawa does not disclose the grouping condition choosing means and the grouping frame, since Tsujikawa does not disclose grouping means for classifying and grouping the element position data into data groups as admitted by the examiner in the Office action. Kishimoto does not disclose the grouping condition choosing means and the grouping frame, as discussed above regarding claim 1.

Similar arguments will apply to claim 15.

Accordingly, the combination of Tsujikawa and Kishimoto does not meet all of the limitations of claims 9 and 15. Therefore, the asserted combination of Tsujikawa and Kishimoto does not render claims 9 and 15 obvious. Thus, withdrawal of the rejection as it applies to claims 9 and 15 is respectfully requested.

Claims 10-14 and 16-20 which are dependent from claims 9 and 15, respectively should be allowable for at least the same reason as claims 9 and 15.

In consideration of the foregoing analysis, it is respectfully submitted that the present application is in a condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

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If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 16-0820, our Order No.: NGB-35948.

Respectfully submitted,

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